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EXAMINER

OU, JING RUI

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/664,134	Applicant(s) RAMZIPOOR ET AL.	
	Examiner JING OU	Art Unit 3773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 12,23,24 and 28-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11,13-22 and 25-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 14-22, and 25-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In regard to Claim 14, the recitation "a motion control means" cannot be found in the original disclosure and is considered as new matter. In regard to Claim 14, the recitation "configured to produce a motion at the distal end of the wire which changes the shape of an embolus **with which the distal end is in contact**" cannot be found in the original disclosure and is considered as new matter.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 and 8-11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Dubrul et al (US Pub. No.: 2002/0019597).

In regard to Claim 1, Dubrul et al discloses a catheter for changing the shape of an embolus comprising: a first elongate shaft (146, Fig. 11C) having a proximal end (the end of 146 outside the tissue 18, Fig. 11C), a distal end (the end of 146 placed inside the tissue 18, Fig. 11C) and a lumen (the first elongate shaft 146 must has a lumen disposed inside for the rotation of tube 134, Fig. 11C and Para.[0062]) therethrough; a second elongate shaft (tubular wire mesh tissue cutter 138 with tubular mesh material 144 in Fig 11F or 112 Fig. 9A) at least partially disposed in the lumen of the first elongate shaft (Fig. 11F and Para.[0062]), the second shaft having a proximal end, a distal end and a lumen (the cutter 138 or 112 must has a lumen disposed on its surfaces for the cutter to move between the outer tube 146 in Fig. 11F or 117 in Fig 9A and the inner tube 121 in Fig. 11F or 115 in Fig. 9A and Paras.[0060] and [0062]) therethrough; a tip (the mesh material, 144, Fig. 11F) disposed on the distal end of the second shaft having a cavity (the cavity of the mesh material, Fig. 11F) fluidly connected to the lumen of the second shaft (Para.[0062]) and a distal opening (the opening of the tubular mesh material 144, Fig. 11F), the tip movable between a first state and a second state wherein the distal opening (Paras [0060] and [0062]) has a greater cross-sectional area in the second state (expanded state as shown in Fig. 11F) than in the first state (compressed state before expanding inside the outer tube 146, Para.[0060] and [0062]); and a vibratable wire (the wire of the mesh cutter, Figs. 9A and 11F) for changing the shape of an embolus at least partially disposed within the lumen of the second elongate shaft (Figs. 11F-11G).

In regard to Claim 2, the wire is configured to unclog the lumen of the second elongate shaft (Since the wire of the mesh cutter can extend outward to the tissue and the mesh material can move from the outer tube to the tissue, it is inherent that the wire can unclog the lumen of the wire of the mesh cutter, Paras.[0060] and [0062]).

In regard to Claim 3, the wire is configured to fragment the embolus (Fig. 11D and Para.[0062]).

In regard to Claim 4, the cavity has a greater volume in the second state than in the first state (the volume of the expanded state is greater than in the unexpanded state, Fig. 11F and Para.[0062]).

In regard to Claim 5, the distal opening is proximal the distal end of the first elongate shaft in the first state (the distal opening of the mesh material of the mesh cutter before expanding into the tissue is proximal to the distal end of the outer tube) and wherein the distal opening is distal the distal end of the first elongate shaft in the second state (the distal opening of the mesh material of the mesh cutter before expanding into the tissue is distal to the distal end of the outer tube, Fig. 11F).

In regard to Claim 8, the second elongate member comprises an expandable braid (Fig. 11F and Para.[0062]).

In regard to Claim 9-10, the catheter further comprises a vacuum source fluidly connected to the distal end of the first shaft and second shaft (It is inherent that there is a vacuum source located outside the tissue and fluidly connected to the distal end of the first shaft and second shaft since fluid is withdrawn through suction inlets 122, Fig 11A).

In regard to Claim 11, the catheter further comprises a clot pulling device (121, Fig. 11B) disposed within the lumen of the second elongated shaft.

In regard to Claim 13, in the second state the distal opening has a cross-sectional area that is larger than the cross-sectional area of the lumen of the first elongate shaft at the distal end (Fig. 11F).

5. Claims 1-5 and 7-8, 11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by White (WO 01/97697).

In regard to Claim 1, White discloses a catheter for changing the shape of an embolus comprising: a first elongate shaft (percutaneous sheath, 21, Fig. 1) having a proximal end (the end of 21 outside the vessel 39, Fig. 1), a distal end (the end of 21 placed inside the vessel 39, Fig. 1) and a lumen (pg. 20, line 2) therethrough; a second elongate shaft (tubular body 17 of extractor means 20, Figs. 1 and 5a) at least partially disposed in the lumen of the first elongate shaft (Figs 1 and 5a), the second shaft having a proximal end (the end of 17 outside the vessel 39, Fig. 1), a distal end (the end of 17 placed inside the vessel 39, Fig. 1) and a lumen (pg. 3, lines 8) disposed on the distal end of the second shaft having a cavity (frusto-conical shape of distal end portion of 17, Fig. 5a and pg. 17, line 12) fluidly connected to the lumen of the second shaft (Fig. 5a), the tip movable between a first state and a second state wherein the distal opening (the distal tip of 17, Fig. 5a) has a greater cross-sectional area in the second state (expanded state, pg. 17, lines 12-14) than in the first state (collapsed state, pg. 17, lines 12-14); and a vibratable wire (guidewire, 11, Fig. 5a) for changing the shape of an

embolus at least partially disposed within the lumen of the second elongate shaft (Fig. 5a and pg. 20, lines 1-20).

In regard to Claim 2, In regard to Claim 2, the wire is configured to unclog the lumen of the second elongate shaft (Fig. 1 and 5a and pg. 20, lines 1-2).

In regard to Claim 3, the wire is configured to fragment the embolus (pg. 20, lines 1-20).

In regard to Claim 4, the cavity has a greater volume in the second state than in the first state (the volume of the expanded state is greater than in the collapsed state, Fig. 5a and pg. 3, lines 7-10).

In regard to Claim 5, the distal opening is proximal the distal end of the first elongate shaft in the first state (pg. 20, lines 12-14) and wherein the distal opening is distal the distal end of the first elongate shaft in the second state (pg. 20, lines 15-16 and Fig. 3b).

In regard to Claim 7, the second elongated shaft comprises a nitinol coiled sheet catheter (Fig. 3b and pg. 10, lines 7-8)

In regard to Claim 8, the second elongate member comprises an expandable braid (Fig. 3c).

In regard to Claim 11, the catheter further comprises a clot pulling device (capture means, 10, Fig. 5a) disposed within the lumen of the second elongated shaft (Fig. 5a).

In regard to Claim 13, in the second state the distal opening has a cross-sectional area that is larger than the cross-sectional area of the lumen of the first elongate shaft at the distal end (Fig. 1).

6. Claims 14-15 and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Uflacker et al (US Pat. No.: 5,243,997).

In regard to Claim 14, Uflacker et al discloses a catheter comprising: a first elongate shaft (catheter, 80, Fig. 4) having a proximal end (the end of 80 located outside the artery 74), a distal end (the end of 80 located inside the artery 74) and a first lumen (it is inherent that the tubular section of catheter has a lumen in order for the guide wire to move inside the catheter) therethrough; a wire (guide wire, 12, Fig. 4) having a proximal end (the end of 12 located outside the artery 74) and a distal end (the end of 12 located inside the artery 74) at least partially disposed in the first elongate shaft, the distal end extending distally from the first elongate shaft (Fig. 4); and a motion control apparatus (combination of vibrating device 10 and clamp 16, Fig. 4) connected to the proximal end of the wire (the clamp 16 is connected to the proximal end portion of the guide wire, Fig. 4).

In regard to Claim 15, the motion control apparatus can impart a vibrating motion to the wire (Col. 3, lines 31-36).

In regard to Claim 18, the vibrating motion is axial (Col. 5, lines 65-68, vibrating in three dimensions includes axial vibrating motion).

In regard to Claim 19, the catheter further comprises a device (inductive element, 84, Fig. 4) attached to the distal end of the wire for changing the shape of an embolus.

In regard to Claim 20, the device is configured to change the shape of the embolus to unclog a distal catheter lumen (since the inductive element is attached to the distal end of the guide wire, it must be able to unclog a distal catheter lumen in order to get through catheter into the blood vessel).

In regard to Claim 21, the device is configured to fragment an embolus (the inductive element can hit and fragment an embolus when the vibrating device vibrates the guide wire, Fig. 4).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dubrul et al (US Pub. No.: 2002/0019597) in view of Kurz et al (US Pat. No. 6,692,504).

Dubrul et al discloses all the limitations of the claim as taught above but fails to disclose that the second elongated shaft comprises a shape memory polyurethane.

However, Kurz et al explicitly teaches that an elongated shaft (clot retrieval apparatus 20, Fig. 3) comprises a shape memory polyurethane (Col. 2, lines 25-35).

Dubrul et al and Kurz et al are analogous art because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Dubrul et al and Kurz et al before him or her, to modify the catheter of Dubrul et al to include a second elongated shaft, comprising a shape memory polyurethane as taught by Kurz et al.

The suggestion/motivation for doing so would have been to control the expansion of the shaft by manipulating the temperature of the shaft material (Kurz et al, Col. 8, lines 20-45).

Therefore, it would have been obvious to combine Kurz et al with Dubrul et al to obtain the invention as specified in the instant claim.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over White (WO 01/97697) in view of Kurz et al (US Pat. No. 6,692,504).

White discloses all the limitations of the claim as taught above but fails to disclose that the second elongated shaft comprises a shape memory polyurethane.

However, Kurz et al explicitly teaches that an elongated shaft (clot retrieval apparatus 20, Fig. 3) comprises a shape memory polyurethane (Col. 2, lines 25-35).

White and Kurz et al are analogous art because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of White and Kurz et al before him or her, to modify the catheter of White to include a second elongated shaft, comprising a shape memory polyurethane as taught by Kurz et al.

The suggestion/motivation for doing so would have been to control the expansion of the shaft by manipulating the temperature of the shaft material (Kurz et al, Col. 8, lines 20-45).

Therefore, it would have been obvious to combine Kurz et al with White to obtain the invention as specified in the instant claim.

12. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over White (WO 01/97697) in view of Dubrul et al (US Pub. No.: 2002/0019597).

White discloses all the limitations of the claims as taught above but fails to disclose a vacuum source that fluidly connected to the distal end of the first shaft and the distal end of the second shaft.

However, Dubrul et al explicitly teaches a vacuum source that fluidly connected to the distal end of the first shaft and the distal end of the second shaft (It is inherent that there is a vacuum source located outside the tissue and fluidly connected to the distal end of the first shaft and second shaft since fluid is withdrawn through suction inlets 122, Fig 11A).

White and Dubrul et al are analogous art because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of White and Dubrul et al before him or her, to modify the catheter of White to include a vacuum source that fluidly connected to the distal end of the first shaft and the distal end of the second shaft as taught by Dubrul et al.

The suggestion/motivation for doing so would have been to withdraw fluid and the occasional particles out of the target site (Dubrul et al, Para.[0062]).

Therefore, it would have been obvious to combine Dubrul et al with White to obtain the invention as specified in the instant claims.

13. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uflacker et al (US Pat. No.: 5,243,997) in view of Dubrul et al (5,380,273).

In regard to Claim 16-17, Uflacker et al discloses all the limitations of the claims but fails to disclose the vibrating motion has a frequency less than about 20 kHz and fails to disclose the vibrating motion has a frequency of between about 1 Hz and about 150 Hz.

However, Dubrul et al explicitly teaches that a vibrating motion has a frequency of 1 Hz to 5000 Hz (Col.3, lines 50-55). Specifically, Dubrul et al discloses that a vibrating motion has a frequency of less than 100 Hz (Col. 2, line 50).

Uflacker et al and Dubrul et al are analogous art because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Uflacker et al and Dubrul et al before him or her, to modify the catheter of Uflacker et al to include a vibration motion that has a frequency of between about 1Hz and about 100 Hz as taught by Dubrul et al.

The suggestion/motivation for doing so would have been that the amplitude and, therefore the energy of the low frequency vibration delivered to the tip of a catheter is much predictable at the lower frequencies and enable more accurate dosimetry (Dubrul et al, Col. 2, lines 50-55).

Therefore, it would have been obvious to combine Dubrul et al with Uflacker et al to obtain the invention as specified in the instant claims.

14. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uflacker et al (US Pat. No.: 5,243,997) in view of White (WO 01/97697).

Uflacker et al discloses all the limitations of the claim but fails to disclose the device is an arcuate wire.

However, White explicitly teaches that the device is an arcuate wire (spoke members 13a of spanning means 14, Fig. 2a)

Uflacker et al and White are analogous art because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Uflacker et al and White before him or her, to modify the catheter of Uflacker et al to include a device that is an arcuate wire as taught by White.

The suggestion/motivation for doing so would have been to prevent escape of dislodged thromboemboli (White, pg. 15, lines 19-25)

Therefore, it would have been obvious to combine White with Uflacker et al to obtain the invention as specified in the instant claim.

15. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uflacker et al (US Pat. No.: 5,243,997) in view of Bates et al (6,224,612).

Uflacker et al discloses all the limitations of the Claim as taught above but fails to disclose the device has a working range of about 2 mm proximally and about 15 mm distally.

However, Bates et al explicitly discloses a medical device that has legs (11a, 11b, 11c, 11d, Fig. 1B) with working ranges of 0.5 to 3.5 inches which is 12.7 mm to 88.9 mm (Col. 6, lines, 60-62).

Uflacker et al and Bates et al are analogous art because they are from the same field of endeavor.

A modification of size(s) or dimension(s) of a device is only a design choice and within level of one of ordinary skill in the art.

Therefore, it would have been obvious to combine Bates et al with Uflacker et al to obtain the invention as specified in the instant claim.

16. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uflacker et al (US Pat. No.: 5,243,997) in view of Briskin (US Pat. No.: 5,728,062).

Uflacker et al discloses all the limitations of the Claim as taught above but fails to disclose the device has a working range of about 2 mm proximally and about 15 mm distally.

However, Briskin explicitly discloses a magnetostrictive driver (60, Fig. 4) that has a length range from 3 mm to 12 mm (Col. 3, lines 43-46).

Uflacker et al and Briskin are analogous art because they are from the same field of endeavor.

A modification of size(s) or dimension(s) of a device is only a design choice and within level of one of ordinary skill in the art.

Therefore, it would have been obvious to combine Briskin with Uflacker et al to obtain the invention as specified in the instant claim.

17. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uflacker et al (US Pat. No.: 5,243,997) in view of Graves et al (5,522,819).

Uflacker et al discloses all the limitations of the Claim as taught above but fails to disclose the device has a working range of about 2 mm proximally and about 15 mm distally.

However, Graves et al explicitly discloses a snare coil that has a working range of 5 mm to 10 mm (Col. 4, lines 23-24).

Uflacker et al and Graves et al are analogous art because they are from the same field of endeavor.

A modification of size(s) or dimension(s) of a device is only a design choice and within level of one of ordinary skill in the art.

Therefore, it would have been obvious to combine Graves et al with Uflacker et al to obtain the invention as specified in the instant claim.

18. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uflacker et al (US Pat. No.: 5,243,997) in view of Wilk et al (US Pat. No.: 5,417, 697).

Uflacker et al discloses all the limitations of the claim but fails to disclose the catheter further comprises a vacuum source fluidly connected to the distal end of the first elongated shaft.

However, Wilk et al explicitly teaches that the device a vacuum source (vacuum pump, 30, Fig. 1) fluidly connected to the distal end of the first elongated shaft (hollow rod, 24, Figs. 1 and 2).

Uflacker et al and Wilk et al are analogous art because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Uflacker et al and Wilk et al before him or her, to modify the catheter of Uflacker et al to further comprises a vacuum source fluidly connected to the distal end of the first elongated shaft as taught by Wilk et al.

The suggestion/motivation for doing so would have been to hold an entrained object in the web member that is attached to the rod (Wilk et al, Col. 5, lines 63-68).

Therefore, it would have been obvious to combine Wilk et al with Uflacker et al to obtain the invention as specified in the instant claim.

Response to Arguments

19. Objections to the drawings and claims have been withdrawn.

20. Applicant's arguments filed on 04/04/2008 have been fully considered but they are not persuasive.

In response to applicant's arguments on election/restriction section of the remark, an arcuate wire, a wire having a zigzag shape, and a wire having a loop are mutually exclusive. In addition, a shaft having an angled distal end and a non-angled distal end are mutually exclusive. Since applicant/applicant's representative elected Figure 1A (an arcuate wire disposed in a shaft having a non-angled distal end), the claims 23, 24, and 29 were not examined.

In response to applicant's arguments on page 16 of the remark, Dubrul disclose a vibratable wire (wire of mesh cutter 138, the wire must be vibratable) at least partially disposed within the lumen of the second elongated shaft. The recitation "for changing the shape of an embolus" is a recitation of intended use. A recitation of the intended

use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. A lumen is defined as a bore of a tube. Since Dubrul discloses hollow second elongate shaft (tubular wire mesh tissue cutter 138 with tubular mesh material 144 in Fig. 11F or 112 Fig. 9A), there must be a lumen of a second elongate shaft. As shown in Figure 11 F, tubular wire mesh tissue cutter 138 and tubular mesh material 144 are engaged and are characterized as the second elongate shaft.

In response to applicant's arguments on page 16 of the remark, Dubrul discloses a tip (the mesh material, 144, Fig. 11F) disposed on the distal end of the second shaft having a cavity (the cavity of the mesh material, Fig. 11F) fluidly connected to the lumen of the second shaft (Para.[0062]) and a distal opening (the opening of the tubular mesh material 144, Fig. 11F), the tip movable between a first state and a second state wherein the distal opening (Paras [0060] and [0062]) has a greater cross-sectional area in the second state (expanded state as shown in Fig. 11F) than in the first state (compressed state before expanding inside the outer tube 146, Para.[0060] and [0062]).

In response to applicant's arguments on page 18 and near the top of page 19 of the remark, White discloses a wire (guidewire, 11, Fig. 5a, the guidewire must be vibratable). The recitation "for changing the shape of an embolus" is a recitation of intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to

patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

In response to applicant's arguments near the bottom of page 19, Uflacker discloses and a motion control apparatus (combination of vibrating device 10 and clamp 16, Fig. 4) connected to the proximal end of the wire (the clamp 16 is connected to the proximal end portion of the guide wire, Fig. 4). The recitation "configured to produce a motion at the distal end of the wire which changes the shape of an embolus with which the distal end is in contact" is a recitation of intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

In response to applicant's argument on top of page 21, Dubrul and Kurz are from the same field of endeavor, clot removers. In Dubrul, the device removes the clot tissue material after the tumor tissue was cut. In Kurz, the device also removes clot material. Therefore, Dubrul and Kurz are from the same field of endeavor.

In response to applicant's argument near bottom of page 21 to page 27, Dubrul disclose a vibratable wire (wire of mesh cutter 138, the wire must be vibratable) at least partially disposed within the lumen of the second elongated shaft. The recitation "for changing the shape of an embolus" is a recitation of intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed

invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Uflacker discloses and a motion control apparatus (combination of vibrating device 10 and clamp 16, Fig. 4) connected to the proximal end of the wire (the clamp 16 is connected to the proximal end portion of the guide wire, Fig. 4). The recitation "configured to produce a motion at the distal end of the wire which changes the shape of an embolus with which the distal end is in contact" is a recitation of intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Conclusion

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JING OU whose telephone number is (571)270-5036. The examiner can normally be reached on M-F 7:30am - 5:00pm, Alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Uyen (Jackie) T Ho can be reached on (571)272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JO

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